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| PTO TRANSMITTAL FORM (to be used for all correspondence after initial filing) JAN 28 2005 U.S. PATENT & TRADEMARK OFFICE | Application Number | 10/816,179 | |
| | Filing Date | March 31, 2004 | |
| | First Named Inventor | Chung J. Lee | |
| | Art Unit | 1763 | |
| | Examiner Name | | |
| Number of Pages in This Submission | 9+ | Attorney Docket Number | DSI 302 |

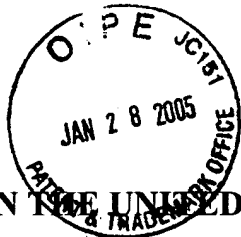
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| Firm Name | Alleman Hall McCoy Russell & Tuttle LLP | | |
| Signature | <i>M. Matthews Hall</i> | | |
| Printed name | M. Matthews Hall | | |
| Date | January 26, 2005 | Reg. No. | 43,653 |

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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Date: January 26, 2005

CHUNG J. LEE, ATUL KUMAR,
CHIEH CHEN and YURI PIKOVSKY

Serial No. : 10/816,179

Group Art Unit 1763

Filed : March 31, 2004

For : SYSTEM FOR FORMING COMPOSITE
POLYMER DIELECTRIC FILM

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.56, 1.97, and 1.98

Applicants are submitting this Supplemental Information Disclosure Statement pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98 to disclose to the U.S. Patent and Trademark Office the patents, publications, applications, and/or other references listed on the enclosed, completed PTO-1449 form(s). The filing of this Supplemental Information Disclosure Statement should not be construed as a representation that a search has been made or as an admission that the listed references are prior art for this application. Applicants respectfully request that the listed references be expressly considered during prosecution of the application, and that the references be made of record therein and appear among the "references cited" on any patents issuing therefrom.

CONTENT OF DISCLOSURE

This Supplemental Information Disclosure Statement includes (1) six pages of PTO-1449 forms, and (2) a legible copy of each foreign and non-patent reference, if any, listed on the form(s). However, because this application was filed on or after July 1, 2003, no copies of U.S. patents or published U.S. patent applications are included.

TIMING OF DISCLOSURE / FEE INFORMATION

This Supplemental Information Disclosure Statement is being filed, to the best of the undersigned's knowledge, either (1) before the mailing of a first Office action on the merits, or (2) before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. § 1.114. Therefore, in accordance with 37 C.F.R. § 1.97(b), no fee or statement under 37 C.F.R. § 1.97(e) is required.

Please contact the undersigned with any questions or comments regarding this Supplemental Information Disclosure Statement.

CERTIFICATE OF MAILING

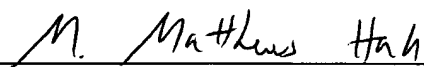
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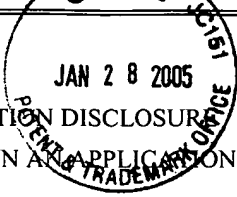
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| FORM PTO-1449 | | DOCKET NUMBER DSI 302 | | APPLICATION NUMBER 10/815,994 | | |
|---|---|-----------------------------------|-----------------|----------------------------------|--------------|-------------------------|
| INFORMATION DISCLOSURE CITATION IN AN APPLICATION  | | APPLICANTS Chung J. Lee et al. | | | | |
| | | FILING DATE March 31, 2004 | | GROUP ART UNIT 2827 | | |
| U.S. PATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FIL. DATE IF APPROP. |
| | 3,268,599 | 08/23/1966 | Chow | | | |
| | 3,274,267 | 09/20/1966 | Chow | | | |
| | 3,280,202 | 10/18/1966 | Gilch | | | |
| | 3,288,728 | 11/29/1966 | Gorham | | | |
| | 3,332,891 | 07/25/1967 | Chow et al. | | | |
| | 3,342,754 | 09/19/1967 | Gorham et al. | | | |
| | 3,349,045 | 10/24/1967 | Gilch | | | |
| | 3,379,803 | 04/23/1968 | Tittmann et al. | | | |
| | 3,503,903 | 03/31/1970 | Shaw et al. | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES NO |
| | EP 0 349 032 A2 | 01/03/1990 | EPO | | | |
| | EP 0 523 479 A2 | 01/20/1993 | EPO | | | |
| | EP 0 856 503 A1 | 08/05/1998 | EPO | | | |
| OTHER DOCUMENTS | | | | | | |
| | Chow et al., <i>Poly (a,a,a',a'-tetrafluoro-p-xylylene)</i> , <u>Journal of Applied Polymer Science</u> , Vol. 13, No. 9, pp. 2325-2332, 1969. | | | | | |
| | Chow et al., <i>The Synthesis of 1,1,2,2,9,9,10,10-octafluorou2, 2Paracyclophane</i> , <u>Journal of Organic Chemistry</u> , Vol. 35, No. 1, pp. 20-22, 1970. | | | | | |
| | Iwamoto et al., <i>Crystal Structure of Poly-p-xylylene. I. The a Form</i> , <u>Jour. Polymer. Sci. Polymer. Phys. Ed.</u> , Vol. 11, pp. 2403-2411, 1973. | | | | | |
| EXAMINER | | | DATE CONSIDERED | | | |

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|---|---|------------|-----------------------------------|-------|----------------------------------|-------------------------|
| FORM PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION | | | DOCKET NUMBER DSI 302 | | APPLICATION NUMBER 10/815,994 | |
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| U.S. PATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FIL. DATE IF APPROP. |
| | 3,509,075 | 04/28/1970 | Niegish et al. | | | |
| | 3,626,032 | 12/07/1971 | Norris | | | |
| | 3,694,495 | 09/26/1972 | Norris | | | |
| | 3,940,530 | 02/24/1976 | Loeb et al. | | | |
| | 4,117,308 | 09/26/1978 | Boggs et al. | | | |
| | 4,518,623 | 05/21/1985 | Riley | | | |
| | 4,823,711 | 04/25/1989 | Kroneberger et al. | | | |
| | 4,996,010 | 02/26/1991 | Modrek | | | |
| | 5,142,023 | 08/25/1992 | Gruber et al. | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES NO |
| | GB 650 947 | 03/07/1951 | Great Britain | | | |
| | GB 673 651 | 06/11/1952 | Great Britain | | | |
| | WO 97/15699 | 05/01/1997 | WIPO | | | |
| OTHER DOCUMENTS | | | | | | |
| | Iwamoto et al., <i>Crystallization During Polymerization of Poly-p-xylene. III. Crystal Structure and Molecular Orientation as a Function of Temperature</i> , <u>Journal of Polymer Science Polymer. Phys. Ed.</u> , Vol. 13, pp. 1925-1938, 1975. | | | | | |
| | Lee, <i>Transport Polymerization of Gaseous Intermediates and Polymer Crystal Growth</i> , <u>J. Macromol. Sci. Rev. Macromol. Chem.</u> , C16(1), p. 79-127, 1977-78. | | | | | |
| | Sharma et al., <i>Optimizing Poly(chloro-p-Xylene) or Parylene C Synthesis</i> , <u>Journal of Applied Science</u> , Vol. 36, No. 7, pp. 1555-1565, Sept. 20, 1988. | | | | | |
| EXAMINER | | | DATE CONSIDERED | | | |

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|---|---|-----------------------------------|--------------------|----------------------------------|--------------|-------------------------|
| FORM PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION | | DOCKET NUMBER DSI 302 | | APPLICATION NUMBER 10/815,994 | | |
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| U.S. PATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FIL. DATE IF APPROP. |
| | 5,217,559 | 06/08/1993 | Moslehi et al. | | | |
| | 5,268,202 | 12/07/1993 | You et al. | | | |
| | 5,320,518 | 06/14/1994 | Stilger et al. | | | |
| | 5,475,080 | 12/12/1995 | Gruber et al. | | | |
| | 5,482,009 | 01/09/1996 | Kobayashi et al. | | | |
| | 5,538,758 | 07/23/1996 | Beach et al. | | | |
| | 5,572,884 | 11/12/1996 | Christensen et al. | | | |
| | 5,639,512 | 06/17/1997 | Nonaka et al. | | | |
| | 5,648,006 | 07/15/1997 | Min et al. | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES NO |
| | WO 97/15951 | 05/01/1997 | WIPO | | | |
| | WO 97/42356 | 11/13/1997 | WIPO | | | |
| | WO 99/21705 | 05/06/1999 | WIPO | | | |
| OTHER DOCUMENTS | | | | | | |
| | Lee, <i>Polyimides, Polyquinolines and Polyquinoxalines: Tg-Structure Relationships</i> , <u>Journal of Macromolecular Science, Part C – Polymer Reviews</u> (formerly <u>Journal of Macromolecular Science, Part C – Reviews in Macromolecular Chemistry and Physics</u>) Vol. 29(4), p. 431, 1989. | | | | | |
| | Lang, <i>Vapor Deposition of Very low k Polymer Films, Poly (Naphthalene), Poly (Fluorinated Naphthalene)</i> , <u>Materials Research Society Symposium Proceedings</u> , Vol. 381, pp. 45-50, April 17, 1995. | | | | | |
| | Wary et al., <i>Polymer Developed to be Interlayer Dielectric</i> , <u>Semi-Conductor International</u> , pp. 211-216, June 1996. | | | | | |
| EXAMINER | | | DATE CONSIDERED | | | |

| | | | | | | |
|---|--|-----------------------------------|------------------|----------------------------------|--------------|-------------------------|
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| U.S. PATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FIL. DATE IF APPROP. |
| | 5,879,808 | 03/09/1999 | Wary et al. | | | |
| | 5,945,170 | 08/31/1999 | Kozak et al. | | | |
| | 5,958,510 | 09/28/1999 | Sivaramakrishnam | | | |
| | 6,051,321 | 04/18/2000 | Lee et al. | | | |
| | 6,130,171 | 10/10/2000 | Gomi | | | |
| | 6,140,456 | 10/31/2000 | Foggiator | | | |
| | 6,144,802 | 11/07/2000 | Kim | | | |
| | 6,265,320 | 07/24/2001 | Shi et al. | | | |
| | 6,302,874 | 10/16/2001 | Zhang | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES NO |
| | WO 99/21706 | 05/06/1999 | WIPO | | | |
| | WO 99/21924 | 05/06/1999 | WIPO | | | |
| | WO 99/22043 | 05/06/1999 | WIPO | | | |
| OTHER DOCUMENTS | | | | | | |
| | Wunderlick, <i>Crystal Nucleation, Growth, Annealing, Macromolecular Physics</i> , Vol. 1-2, pp. 242-243, 246-247, 1996. | | | | | |
| | Greiner, <i>Poly(1,4-xylylene)s: Polymer Films by Chemical Vapour Deposition, Trends in Polymer Science</i> , Vol. 5, No. 1, pp. 12-16, 1997. | | | | | |
| | Harrus et al., <i>Parylene Af-4: A Low ϵ_r Material Candidate for ULSI Multilevel Interconnect Applications</i> , <i>Material Research Society Symposium Proceedings</i> , Vol. 443, 1997. | | | | | |
| EXAMINER | | | DATE CONSIDERED | | | |

| | | | | | | |
|---|---|-----------------------------------|-----------------|----------------------------------|--------------|-------------------------|
| FORM PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION | | DOCKET NUMBER DSI 302 | | APPLICATION NUMBER 10/815,994 | | |
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| | | FILING DATE March 31, 2004 | | GROUP ART UNIT 2827 | | |
| U.S. PATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FIL. DATE IF APPROP. |
| | 6,703,462 | 03/09/2004 | Lee | | | |
| | 6,797,343 | 09/28/2004 | Lee | | | |
| | 2002/0050659 | 05/02/2002 | Toreki et al. | | | |
| | 2002/0120083 | 08/29/2002 | Lee | | | |
| | 2003/0051662 | 03/20/2003 | Lee | | | |
| | 2003/0072947 | 04/17/2003 | Lee | | | |
| | 2003/0143341 | 07/31/2003 | Lee | | | |
| | 2003-0188683 | 10/9/2003 | Lee | | | |
| | 2003-0195312 | 10/16/2003 | Lee | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES NO |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| OTHER DOCUMENTS | | | | | | |
| | Plano et al., <i>The Effect of Deposition Conditions on the Properties of Vapor-Deposited Parylene Af-4 Films</i> , <u>Material Research Society Symposium Proceedings</u> , Vol. 476, pp. 213-218, 1997. | | | | | |
| | Ryan et al., <i>Effect of Deposition and Annealing on the Thermomechanical Properties of Parylene Films</i> , <u>Material Research Society Symposium Proceedings</u> , Vol. 476, pp. 225-230, 1997. | | | | | |
| | Yang et al., <i>High Deposition Rate Parylene Films</i> , <u>Journal of Crystal Growth</u> , Vol. 183, No. 3, pp. 385-390, 1998. | | | | | |
| | Mathur et al., <i>Vapor Deposition of Parylene-F Using Hydrogen as Carrier Gas</i> , <u>Journal of Materials Research</u> , Vol. 14, No. 1, pp. 246-250, 1999. | | | | | |
| EXAMINER | | | DATE CONSIDERED | | | |

| | | | | | | |
|---|--|------------|-----------------------------------|-------|----------------------------------|-------------------------|
| FORM PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION | | | DOCKET NUMBER DSI 302 | | APPLICATION NUMBER 10/815,994 | |
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| | | | FILING DATE March 31, 2004 | | GROUP ART UNIT 2827 | |
| U.S. PATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB CLASS | FIL. DATE IF APPROP. |
| | 2003-0198578 | 10/23/2003 | Lee | | | |
| | 2003-0196680 | 10/23/2003 | Lee | | | |
| | | | | | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUB CLASS | TRANSLATION YES NO |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| OTHER DOCUMENTS | | | | | | |
| | Morgen et al., <i>Morphological Transitions in Fluorinated and Non-Fluorinated Parylenes</i> , <u>Material Research Society Symposium Proceedings</u> , Vol. 565, pp. 297-302, 1999. | | | | | |
| | Brun, <i>100nm: The Undiscovered Country</i> , <u>Semiconductor International</u> , p. 79, February 2000. | | | | | |
| | Peng and McGivern, <i>Quantum Yields and Energy Partitioning in the UV Photodissociation of Halon 2402</i> , <u>Journal of Chemical Physics</u> , Vol. 113, No. 17, pp. 7149-7157, 2000. | | | | | |
| | Rashed, <i>Properties and Characteristics of Silicon Carbide</i> , website publication (www.poco.com), POCO Graphite Inc., 2002. | | | | | |
| EXAMINER | | | DATE CONSIDERED | | | |